



ANNUAL REPORT 1997

AFIP

Armed Forces Institute of Pathology, Washington, DC



NATIONAL MUSEUM OF HEALTH AND MEDICINE, AFIP

Adrienne Noe, Ph.D.

Director

Date of Appointment—September 1995

OFFICE OF THE DIRECTOR

MISSION/ORGANIZATION

The Office of the Director oversees the general activities and governance of all aspects of the Museum and provides policy, technical, and scientific direction. This office also directs all planning activities for the site, facility, and programs of the Museum as its planning evolves. Activities handled within the office are external relations, governmental affairs, press and public relations, and institutional development. The office works with print and broadcast media, congressional offices, and local, national, and community organizations to encourage contact with and coverage of AFIP's National Museum of Health and Medicine. We seek to emphasize the Museum's focus on critical public and military health issues, the importance of the Museum as a bridge between biomedicine and the general public, the Museum's role in helping to recruit the health professionals of tomorrow, and the Museum's research programs in medical history, medical anthropology, the epidemiology of chronic disease, human diet and nutrition, art in medicine, medical imaging, and other areas. The office provides general supervision of the Division of Public Programs and Exhibitions, the Collection Division, and the Research Division. The Office of the Director communicates and coordinates with the American Registry of Pathology (PL94-361) and numerous public and private organizations for institutional development. The Director, National Museum of Health and Medicine, is a member of the AFIP Executive Committee.

STAFF

Theresa Garrard, Director's Assistant

Robert Goler, Special Projects

Carol Mahoney, Public Relations Specialist

Adrienne Noe, Ph.D., Director

(A) Suzanne M. Silver, LtCol, USAF, MSC, Administrator

The Office of the Director has represented the NMHM within the Institute on numerous regular and special meetings, most notably by participating as a full member of the Executive Committee and as a convener in the Institute's strategic planning process. In addition, extensive work toward revitalization and promotion of Museum programs has been completed with professional, medical, veterinary, and other groups, federal organizations such as the National Institutes of Health, the National Science Foundation, and the Howard Hughes Medical Institute, and all aspects of planning processes.

As part of a long-term effort to increase the effectiveness of the Museum's budget and staff efforts, the staff continues to investigate and participate in collaborative projects with other museums and federal agencies. Activities include joint programming, collection collaborations, and shared exhibition development or installation.

During 1997, work continued on two extended research projects. One is a selective history of the AFIP to complement the specific core issues that have emerged from the Institute's strategic planning process. Discussions on this project were held with members of the Institute's directorate, historians at other federal agencies, and officers of the Society for History in the Federal

Government. A survey of relevant historical resources is being compiled. The results of this project may coincide with the 50th anniversary of the AFIP's reorganization as a tri-service organization under General Orders No. 32, Department of Army (1949).

The other projects involve a historical investigation on the public perception of the Museum as a public entity. This project includes examining the Museum's dimension, the inclusion of the Museum in institute operations, and potential American Association of Museums accreditation. Initial research has been conducted in the Museum's Otis Historical Archives, the National Archives and Records Administration, the Smithsonian Institution Archives, the National Library of Medicine, and local academic institutions.

Service to the Armed Forces Institute of Pathology by staff of this office includes membership in the Information Guidance Council, the Scientific Computing Group, the Master Planning Group, the Resources Management Committee, the Strategic Planning Committee, the Research Committee, the Registrars' Forum, the Tissue Utilization Committee, and the Education Committee.

Presentations we participated in outside of the Institute include working with the following groups:

The National Oceanographic Atmosphere Administration

The Duke University Medical School Center for In-vivo Microscopy

The Aerospace Medical Association

The Association of Science and Technology Centers

The National Health Sciences Consortium (as a member of its Board of Directors and the representation of the consortium's only Washington, D.C. site), the Congenital Heart Research Center at the Oregon Health Sciences University in Portland, the University of Illinois at Champaign-Urbana Biomedical Research Laboratory, and the Museum of Medical History in Copenhagen.

Other professional services include executive roles with numerous medical and scientific groups, principal investigator roles with the National Science Foundation and National Institutes of Health funded activities, and service as a formal nominator for the scientific and medical image work for the Eisenstadt Awards of the Columbia School of Journalism.

Several major Museum projects were successfully undertaken with the Howard Hughes Medical Institute, the Museum for African Art in New York, and the National Gallery of Art in Washington, D.C.

PUBLIC RELATIONS

During 1997, the Public Relations Department undertook an aggressive campaign to build on the increased recognition that came with establishment of the Museum's first independent logo, its Yellow Pages listing, and other marketing initiatives begun in 1996. The campaign, designed to solidify local and regional exposure, enhance national and international exposure, and increase Museum attendance, focused on three elements:

- creating the media materials and other essential tools necessary to make the Museum market-competitive;
- designing and developing a Museum advertising program and establishing the mechanisms to implement it; and
- initiating and nurturing relationships with the military, medical professional, business, and tourism communities to enhance Museum outreach and reach marketing objectives.

The success of Public Relations Department efforts can not only be measured by the breadth and variety of activities undertaken. It can also be measured by the results produced. The Public Relations Department created a succession of professional press/marketing materials, including an informational sheet and Museum history, design and text for a four-color, eight-panel gatefold brochure, a selection of four-color keepsake postcards, and the Museum's first-ever display

advertising series. The Public Relations Department also completed the development phases for a brochure on Civil War medicine and a 12-panel, four-color guide/locator to Museum exhibits. Both go into production early in 1998.

In all, the Public Relations Department compiled and distributed more than 10,000 press and information kits, including more than 4,500 distributed to medical professionals at the American Hospital Association convention and other association meetings held throughout the year in the District of Columbia. In addition, the Public Relations Department created the numerous press releases, flyers, and other promotional materials necessary to support daily operations, no less than seven public programs, and the installation of four exhibits during 1997. Roughly 100,000 copies of these materials were distributed to the public.

Public Relations Department initiatives to develop partnerships with local and regional business and professional organizations netted the Museum more than \$35,000 in extramural and in-kind funding, and created exciting opportunities throughout the year for increased public exposure. Public Relations planned and orchestrated a major press event in May, when the National Mental Health Association launched National Mental Health Month with a gala reception at the Museum, in conjunction with the opening of an exhibit of art by persons with mental illness. Backed by major corporate sponsorship from Janssen Pharmaceutical and Bristol-Meyers Squibb, the event raised the Museum's profile within the local business and tourism industry and led directly to the Museum's inclusion in a variety of tourist publications, including the D.C. Chamber of Commerce's *Tourist Guide* and the Committee to Promote's publication, *100 Free Things to Do in DC*. More than 2 million copies of these guides are distributed annually.

This event's success helped make inroads with the D.C. Area Concierge Association, which petitioned Public Relations to hold its October meeting at the Museum. The organization, an important player in promoting local attractions to area hotel guests, is now highlighting the Museum as a featured D.C. attraction.

The department partnership with the DC Heritage Tourism Coalition, an area organization dedicated to providing quality educational and heritage experiences and increasing tourism off the Mall, has also proven valuable. Coalition membership has provided, pro bono, the research necessary to complete the Museum's Civil War loop tour product. The coalition will continue to volunteer as a project development consultant and assist with marketing in 1998, with product launch projected to coincide with the opening of the Museum's new Civil War exhibit in September.

Public Relations Department efforts during 1997 also resulted in the Museum being designated by the National Civil War Trust as an official Civil War Discovery Trail destination. The designation creates an important marketing partner since the Civil War Trust markets Discovery Trail designees nationwide, thereby providing millions of Civil War heritage travelers an automatic pipeline to the Museum, at no charge to the Museum. The designation also guarantees the Museum's inclusion in the 1998 edition of *Forster's Travel Guide to Civil War Sites*, increasing the likelihood the Museum will be included in other similar guides.

Other Public Relations Department business-to-business ventures during 1997 include working with InfoTech Marketing of Yardley, Pennsylvania, to get Museum photos and information placed onto kiosks currently located in nine Washington, D.C., hotel lobbies. Plans are now in the works to add 12 more hotels during 1998 and to assist the editor of *Where Washington* with the compilation of a "medical things to do" guide (featuring the Museum) targeted for distribution to visiting medical professionals.

Additionally, the Public Relations Department crafted and developed the mechanisms required to orchestrate a 12-month creative advertising campaign, with a minimum of 66 display ads, to tap into the local and regional leisure market, to attract the attention of tourists, and to increase visitation by a minimum of 35%. The package places print ads in the *Washington Post*, the *Washington Times*, the *Washington City Paper*, the *Baltimore Sun*, and the *Washington Flyer* magazine; places photos and Museum information that can be downloaded with the touch of a button onto electronic kiosks at both airports; and builds on earlier Yellow Pages advertising with the addition of a

color photo, 75 words of text, and a 60-second recorded message in the Yellow Pages InfoScene directory. The total package, with a combined circulation/distribution of more than 7 million, offers tremendous potential to saturate the local and regional market and reach the area's more than 20 million annual visitors. The advertising package takes effect in early 1998. The Public Relations Department will then assume the tasks of developing ad designs and copy and ad scheduling.

Electronic Media

Interviews with Museum staff and/or about Museum collections were featured in a variety of local, regional, national, and international TV, film, video, and radio projects throughout 1997, including the "Doctor, Doctor" segment of *In the Prime*. The health program, produced locally by WETA-TV, aired on PBS stations nationwide in November and December. Other productions included a film on the history of polio, shot by The George Washington University Center for History in the Media and scheduled for limited general release in 1998; early spring 1997 segments on local TV Channel 4 and Channel 9, featuring the Museum's *Reckoning in Stone* exhibit; the *War and Medicine* series, narrated by Dr. Bob Joy and produced by Worldview Pictures, London, England; a Korean TV production on the human body; both a Discovery Channel feature and a Pan American Health Organization feature on the Spanish flu; and a feature on interesting Washington, D.C., attractions, which aired locally on WNVC-TV's *Washington International Magazine*. Additionally, the Museum was listed as a featured science site in all promotional and educational materials for the heavily marketed WNET-NY production on biomedical technology, *Innoventions*, narrated by actor Martin Sheen, which aired nationally on PBS.

The Public Relations Department granted a series of radio interviews during 1997, as well. Museum staff appeared on the nationally syndicated Greaseman radio show on two separate occasions. A variety of travel stories running across the nation prompted a flurry of calls from radio stations in Ann Arbor, Mich., Fargo, N.D., and Miami, Fla. Talk-640 in Toronto, Canada, aired a 5-minute segment on the Museum. An interview with Museum staff will be featured in an NPR documentary on the history of disabilities that was produced in December and will air in spring 1998. Also, locally, WAMU devoted short-feature time to help promote both the *Reckoning in Stone* and *Inside/Out* exhibits.

The Web

The Museum Public Relations department was principally involved in development of the Museum Web page, slated to go on line in March 1998. Public Relations proactively sought other opportunities for on-line exposure targeting the tourism and education marketplace. The Museum is currently listed on the Maryland Science Center *Discover Science* site, on Microsoft's washington.sidewalk.com, and at washingtonpost.com.

Print Media

Public Relations Department efforts accounted for a 300% increase over 1996 in overall print coverage, with a notable increase in coverage across the nation. Articles and significant mentions about the Museum, or specific exhibits and programs, were published throughout the year in numerous sources, including *George Magazine*, *Colours Magazine* (Rome, Italy), *Men's Health*, the *New York Times Magazine*, *JAMA*, the *Boston Herald*, the *Miami Herald*, the *Pittsburgh Post Gazette*, the *Dallas Morning News*, the *Army Times*, the *Time Machine*, the *Toronto Star*, the *New Jersey Star Ledger*, the *New York Post*, the *Cleveland Plain Dealer*, and the *Reading Eagle*. Museum stories were also distributed by Knight-Ridder and the Associated Press.

Locally, Museum stories appeared in the *Washington Times*, the *Sunday Journal*, the *Northern Virginia Sun*, the *Centerville Times*, *The Bugler*, and *The Stripe*, with multiple stories and mentions appearing in the *Washington Post* and the *Washington City Paper*.

Regular features on the Museum appear in the *AFIP Letter*. The Museum continues to be listed in a variety of popular travel guides, including the *Mobil Travel Guide*. For the second year in a row, AAA's *Mid-Atlantic Region Guide* highlighted the Museum as a featured regional destination. Additionally, information about the Museum and its activities are mentioned with frequency in a variety of Washington Convention and Visitor Association calendars, travel planning guides, and other widely distributed promotional materials.

Professional Activities and Continuing Education

The Public Relations Department staff, on behalf of the Museum, has lent its marketing, product development, and project management expertise to a variety of local tourism industry initiatives. Carole Mahoney acted as a session facilitator for the D.C. Heritage Tourism Coalition's strategic planning seminar, has served on that organization's logo and mission statement development committees, and currently sits on the coalition's Executive Board.

Carole Mahoney is a regular attendee at Washington Convention and Visitor Association, D.C. Chamber of Commerce, and Travel and Tourism Industry seminars and information sharing sessions. These sessions have proved invaluable in keeping the Museum plugged into the latest tourism and marketing information and trends and in raising the Museum's profile among the region's tourism industry leaders.

Initiative on Museum Accreditation

Mr. Goler continued to direct the initiative on Museum accreditation. This initiative was undertaken to determine the feasibility of obtaining formal accreditation from the American Association of Museums (AAM). A detailed briefing paper was previously submitted for presentation to the Board of Governors. To increase his familiarity with the technical aspects of the program, Mr. Goler served as chair of the Accreditation Visiting Committee to two museums—a historical museum and a health museum. Mr. Goler has been invited to participate in a special session on museum accreditation issues at the upcoming national conference of the American Association of Museums.

SPECIAL PROJECTS

Mr. Goler initiated planning for a CAME-type History of Medicine course. After surveying graduate level courses in medical humanities, he organized a draft schedule with faculty drawn from institutions throughout the region. Plans include direct contact with Museum collections, updates on new electronic media, and presentations by those involved in current medical history research. This proposal was submitted to the Museum and CAME administrations for review and funding authorization.

During the year, Mr. Goler provided administrative and historical briefings to assist the staff in work with the National Health Sciences Consortium, on temporary exhibition selection, and for a special program for students from The George Washington

University Medical School. He also began work to design a survey of historical medical collections held by military museums, to be used as a resource for future exhibition planning. As part of a long-term strategy to increase the awareness and influence of the Museum, Mr. Goler continued to explore possible collaborations and alliances with other cultural organizations in the metropolitan area.

Institutional Research

Significant progress was made on institutional research in this period. Historical resources were reviewed at AFIP, the Library of Congress, the National Archives and Records Administration, the National Library of Medicine, and the Smithsonian Institution Archives. Previously unknown materials were uncovered, and efforts are underway to obtain duplicates for the Otis Historical Archives. Portions of this research were presented at a conference on "Life and Death" at the University of California, Berkeley, and at the Smithsonian Institution.

Professional Services and Development

During 1997, Mr. Goler continued to provide professional assistance to the museum field and to organize activities to generate greater awareness of the Museum's activities. He chaired a session on scholarship in museums at the American Association of Museums annual meeting and represented the Museum at professional meetings offered by the Historical Society of Washington, the National Library of Medicine, and the Smithsonian Institution. He continued to serve on the planning committee of the Annual Washington Historical Studies Conference, as a Museum Assessment Program surveyor for the American Association of Museums, and as a general operating grants reviewer for the Institute of Museum and Library Services.

Mr. Goler completed his second year as chair of the District of Columbia Awards Committee for the American Association for State and Local History (AASLH). This appointment has enabled him to work closely with museum and nonprofit professionals throughout the region to increase awareness of the Museum's activities. Nominations were evaluated for the 1997 Award Competition and resulted in a fivefold increase in recognition awards for local institutions. Submissions for the 1998 Awards Competition are underway.

Mr. Goler continued to serve as guest editor for a special issue of *Caduceus* during 1997. This issue was scheduled for publication in 1998; however, funding problems led the journal to cease publication at the end of the current year. Other venues for the papers are being explored.

DIVISION OF PUBLIC PROGRAMS AND EXHIBITIONS

MISSION/ORGANIZATION

The division directs and coordinates operational and interpretive components of the Museum. This includes administration, exhibitions, public programs, educational tours, facilities use, and related activities. Division staff works with governmental agencies, professional associations, museums, and individuals to develop interpretive strategies that promote greater public awareness of contemporary and historical perspectives of disease, public health, and health education.

STAFF

- Lisa Berndt, M.F.A., Designer
- Sarah Carey, B.A., Exhibits Specialist
- Katherine J. Epler, M.A.T., Visitor Services Manager
- Kathryn A. Foat, M.A.T., Public Programs Coordinator
- Jeanne Levin, B.S., Tour Programs Manager
- (A,D) Emily L. Hollis, A.B., Ed.M., Visitor Services Representative
- (A,D) Sandra H. Newton, A.A., Visitor Services Representative
- Susan Pasko, B.F.A., B.S.N., Visitor Services Representative
- (D) Gene T. Pittman, B.F.A., Visitor Services Representative
- (A) Amy E. Simonsen, B.A., Visitor Services Representative
- (A,D) Narjes R. Soliman, B.S., B.Mu., Visitor Services Representative
- (A) Paul J. Wcisel, B.A., Visitor Services Representative
- (D) Marva A. Wroten, Visitor Services Representative

Docents

Dr. Ed Beeman, Catherine E. Bonomo, Dr. Merlin Brubacker, Dr. Irving Cashell, James J. DePersis, Dr. Jason Geiger, Dr. Ira Green, (D) Barbara Holts, Regina Hunt, Albert Jacobs, (D) Octavia Johnson, Sol Pargament, Colleen Pettis, Anne Pollin, Shirley Ross Pyke, Dr. Edward Rea, Enid Rosen, Dr. George Sharpe, Dr. S. Stephen Schiaffino, and Rose Zimmerman.

The following individuals were selected as new docents in August 1997. They began training in September.

Dr. Sal Battiata, (A,D) Farida Bhatti, Edward Byrdy, Margaret Garner, C. H. George, Carol Jorgensen, LaVerne Madancy, Kay McMahon, Dr. Richard Mulvaney, Vivian Sadin, Caroline Wittenberg, Mary Wilburn, (A,D) Dr. Bernard Rappaport.

Docents contributed 3,804 hours for guiding tours, developing content-based tours, and participating in training.

The following individuals volunteered hours to support activities in Museum divisions. The Museum staff member and the number of hours donated by the volunteer are indicated after each name.

Lourdes Cabading (Foat) 18, Talisa Murray (Fobbs) 19, Cathy Kim (Fobbs) 9, Margaret

Garner (Rhode) 30, Andrew Pasko-Reader (Fobbs) 11, Marilyn Koering (Lockett) 16, LeJuan Green (Garrard) 132, Marcy Levernz (Rhode) 151, Markus Ring (Hawk) 125, Jhumka Gupta (Foat/Berndt) 4, Farida Bhatti (Levin) 14

Total nondocent hours: 529

Interns

The following high school, college, or graduate students completed internships at the Museum. The Museum staff member is indicated.

Claire Pearson 96 (Lockett), Keewong Song 146 (Fobbs), Shulpa Shah 136 (Lockett), Shannon Collins 196 (Sledzik/Barbian), Charles Ince 17 (Sledzik/Barbian), and Julie Probst, 67 (Fobbs).

Total hours: 658

VISITOR SERVICES

Attendance

Overall attendance at the Museum in 1997 was 42,297. General attendance refers to walk-in visitors. Tours included guided tours by the volunteer docents and unscheduled drop-in groups. Special events include programs by the Museum for a public audience, receptions for organizations with related missions of the Museum, meetings or courses offered by other divisions of the AFIP, and meetings or training sessions from other units of WRAMC.

Category	Numbers
General Attendance individuals	19,004
Tours—Guided groups	283
..... individuals	9,374
Unscheduled individuals	9,000
Special Events individuals	4,919
Total	42,297

Overall attendance increased by 12% over last year. Group visits continue to grow. The combined numbers of unscheduled groups and guided tours increased by 14% over 1996, rather than the 2% between 1995 and 1996. The unscheduled groups increased by 30% over last year, due in part to the number of participants in unscheduled visits last year who selected one of the new guided programs being offered for the first time.

OFFICE OF PUBLIC PROGRAMS

The Public Program Committee, chaired by Kathryn Foat, continues to guide the development of a range of educational programs offered at the Museum. During this year, the office offered programs in forensic anthropology, art history, and breast cancer.

In February, Clea Msindo Koff, a University of Arizona graduate student and member of the United Nations International Criminal Tribunal, presented her experiences in "Grave Matters: A Personal Account of Unearthing Evidence of War Crimes in Rwanda, Bosnia, and Croatia."

The first Saturday in March has become a day for programming for U.S. Girl Scouts. We offered "All You Can Be!" in support of the badge requirements *Be Your Best*. Instructors from WRAMC's Nutrition Program, AFIP's Physiology Division, the Museum docents, and contractors presented sessions on nutrition, exercise, human biology, and substance abuse prevention art.

The final program for the lecture series associated with the exhibition, "Reckoning in Stone: Jill Lion on Breast Cancer," was held in March. "From Breast Cancer to Barbie: Positioning the Female Breast in Twentieth Century American Popular Culture" was presented by Dr. Cayo Gamber, visiting assistant professor of English at The George Washington University.

"Images of Mental Illnesses" was a lecture series in conjunction with the temporary exhibition "Inside Out." A quick response grant from the Humanities Council of Washington, D.C. for a total of \$1,500 provided partial support in the American Registry of Pathology. The Very Special Arts organization provided matching funds by supporting the travel costs of speakers, in-kind contribution for the moderator, and support for program development.

This three-part series was presented from April to June. Daniel R. Weinberger, M.D., chief of the Clinical Brain Disorders Branch, National Institute of Mental Health, began the series with "Imaging the Brain in Mental Illness: Is One Look Worth a Thousand Listens?" Stephanie Smutz, director of the Very Special Arts Gallery, Washington, D.C., served as moderator for "Artists and Images: In Their Own Words," featuring three artists representing Very Special Arts—Daniel Napier of North Carolina, Cindy Risk of Tennessee, and Jack Beaverland ("Mr. B") of Florida. Concluding the series, Dr. John MacGregor, Princeton-trained art historian and recognized author of psychiatric art, presented "The Magic World of Adolf Wölfli" and an informal discussion of selected art in the exhibition.

The Fall series, marketed to high school and college students, "Dead Speak: Mass Disaster, Forensic Science and the Media," was developed with Paul Sledzik in response to the requests from the general public to participate in the professional training course offered by Mr. Sledzik. The series began in October with a lecture entitled "Interpreting the Silence," by Paul Sledzik, curator of Anatomical Collections. Dr. Lenore Barbian and Marilyn London joined Mr. Sledzik for hands-on stations.

In November, Demeris Lee, chief nuclear DNA analyst, Armed Forces DNA Identification Laboratory, explained DNA fingerprinting, "Little Whispers, Big Noise." "Sign Language" by Danny Greathouse, retired chief, Latent Fingerprint Section, Federal Bureau of Investigations and consultant, explored the contribution fingerprints makes to identification. The series concluded with "The Truth of the Matter," by Christopher Kelly, Public Affairs director, AFIP, exploring the relationship of the media and the medical community.

Professional Training

Montgomery County Public Schools participated in teacher training on comparative anatomy, microscopes, and human physiology taught by Museum docent Catherine Bonomo and staff members. Lenore Barbian, Kathryn Foat, and Paul Sledzik. (Attendees, 68 teachers)

Kathryn Foat conducted training at the Howard County Teacher Symposium, "Reading, Writing and Relevancy." (Attendees, 28)

Lisa Berndt, Kathryn Foat, and Paul Sledzik provided a lecture to Museum Studies course, "Museums and The Public" from The George Washington University.

Kathryn Foat served as mentor/site coordinator for students in the "Audience" course offered by the graduate school program, Museum Education at The George Washington University. (Attendees, 6)

Kathryn Foat provided a guided tour of the Museum's exhibition, "Living in a World with AIDS," to students in the Department of Agriculture University course "HIV/AIDS and Society." (Attendees, 30)

Conferences or receptions of note included:

The American Medical Women's Association

Clinical Anatomist Meeting, Embryological Imaging Section of the American Association of Clinical Anatomist, April 20-27

The Charlene Jarvis Science Awards, June 14

Volksmarchers Annual Walk, September 13-14

Washington Conservation Guild Meeting and Reception, October 2

Washington Concierge's Meeting and Reception, October 9

George Washington University Medical School Reunion, October 18
The Society for Medical Consultants to the Armed Forces, October 31

Ongoing Programs

We offered Summer Public Tours to walk-in visitors on every Wednesday for 1 hour, beginning at 11:30 a.m., between June 25-August 13. Reservations were not required. Attendance varied from 1 to 12 individuals per tour. The visitors' comments were favorable, and we are working on making this a permanent offering during the summer.

The Discovery Carts continue to be popular with general visitors. A new topic was added, "Microscopes: A Closer Look." Visitor services representatives staff the carts every Saturday, Sunday during the holidays, from 2-4 p.m.

Administrative Duties As Assigned

With the ARP, staff assisted in conducting personnel searches for replacement of visitor services representatives. In preparation for the new contract year, job descriptions were altered to create two full-time visitor services representative positions from two part-time positions.

Tour Program

New Docent Training

Staff from AFIP divisions, including the Museum, and USUHS taught the weekly sessions. Topics covered included:

- Museum Experience and Museum Audience
- Tour Techniques, Interpreting Historical Objects, Infectious Diseases, History of Medicine, Urology, Conservation
- Cardiology, Pulmonology
- Endocrinology, Lymphatic System, Interpreting Science and Anatomical Objects, and Gastroenterology

The new tours developed last year that align with school district curriculum and support the national agenda by the American Association for the Advancement of Science, *Project 2061: Benchmarks for Science Literacy*, "Curriculum Connections" are being successfully marketed. The "Human Body," a specialized tour targeted for students in high school anatomy and physiology courses, was offered 20 times. "Turning Points: The Nature of Medicine" and "Progress Against Disease" have been offered four times.

Group size continues to increase as schools are required to maximize the use of the bus and be all inclusive. On average, the group size is 33 students; however, the range is from 10 to 137. A Forensic Activity was developed by Lenore Barbian, Kathryn Foat, and Paul Sledzik that includes five laboratorylike stations of forensic anthropology activities. The goal of the 30-minute session is for teams of students to identify an unknown victim, given six from which to select. This activity is in the pilot stage and is being offered to upper-level high school students in anatomy/physiology courses.

Ongoing monthly training sessions are an important part of maintaining quality guided tours. This year sessions included:

January - AIDS lectures by Dr. Mary Kläussen and Dr. Ann Nelson

February - Howard Hughes film on "Double Life of RNA"

March - Collection Department lecture by Michael Rhode

April - Museum overview by Kathy Foat

May - Docent yearly outing to the National Dentistry Museum in Baltimore, Md.

August - New Programs

September - Farewell luncheon for Barabara Holts

October - Markus Ring lecture, "The Notorious Daniel Sickles"

November-December - Red Cross Orientation

Community Outreach and Collaborative Events

Lecture at the Jewish Community Center by Jeanne Levin

AFIP- and WRAMC-sponsored Events

ConMed Tour, February 25

Ash Lecture, May 8

WRAIR Biometrics, Tri-Service Conference Overflow Space, May 19

WRAMC Hail and Farewell, June 12

AFIP, Cellular Pathology Reception, June 19

AFIP student intern lectures, July 30, August 6, 12, 13

AFIP school partnership with Takoma Park school

WRAIR student interns of science and engineering, July 9, 16, 23

AFIP, Veterinary Pathology Reception, August 5

WRAMC, Psychiatric Services Conference, September 18-19

AFIP, Environmental Toxicology Course and Reception, October 6 -8

AFIP, 50th Anniversary Dinner for the Department of Radiology, October 27

AMED Reception, November 21

Howard Hughes Holiday Lectures, December 8-9

WRAMC Psychiatric Services Conference, December 12

AFIP, ARP Annual Holiday Party, December 19

PROFESSIONAL ACTIVITIES

Katherine Epler serves as a member of the Museum Education Roundtable on the Program Planning Committee.

Kathryn Foat chaired a session at the 1997 annual meeting of the American Association of Museums. Ms. Foat served as a grant reviewer for the Institute of Museum and Library Services.

EXHIBITIONS

The Museum continued to develop exhibition projects during 1997 and engaged in strategic planning for a major exhibit to be opened in the year 2000.

National Health Science Consortium, Women's Health Project:

Pregnancy: Getting Off to a Good Start: This exhibit was displayed as a prototype unit at the Maryland Science Center in the spring of 1996. The prototype effort represented NMHM's contribution as a member of the National Health Science Consortium to its current exhibit project, The Women's Health Project. After extensive evaluation, a modified and redesigned exhibit was installed at NMHM in Brinton Hall. The modified exhibit, which emphasizes the importance of prenatal care, allows visitors to compare ultrasound videos, try on a "pregnancy garment," and simulate an ultrasound wave in a mechanical interactive. Visitors are also able to access a laserdisk interactive using HDAC-generated computer models of embryos at different stages of development. NMHM continues to be involved in the development of the WHP exhibit through participation in the NHSC's exhibit committee.

Civil War Medicine: Planning began during the fall of 1997 for this major reinstallation, scheduled for fall 1998. Museum staff will incorporate period exhibit cases on long-term loan from the Smithsonian Institution into the gallery.

Research Matters: Closing in on a Killer-Scientists Unlock Clues to the Spanish Influenza Virus. This exhibit was installed on March 25, 1997, as the latest in a series of exhibits focusing on research being done within the AFIP. The exhibit highlighted the efforts of Dr. Jeffery Taubenberger and his team in Cellular Pathology to study the genetic structure of the 1918 influenza virus from recreated fragments of genetic material from a lung sample of a WW1 soldier.

Research Matters: And One Small Step for Cell Biology. . .—Astronauts' Post-Flight Weakness Prompts Scientists to Study the Effects of Gravity on Cells. Planning for this exhibit began in the fall of 1997. Installation is anticipated in the spring of 1998. This exhibit will highlight AFIP staff's

studies on space-flown muscle cell myoblasts. Major David Kulesh and Capt William Ross have provided content guidance for the project.

Discovery Cart: A custom cart with space for teaching tools and banner was designed for the Public Programs Department. Construction was completed and the unit was installed on the exhibit floor in January 1997. A similar Discovery Area is being planned for the Microscope exhibit in 1998.

Temporary Exhibit Program: The Museum's Silliphant Hall is dedicated to temporary installations. Two exhibits were rotated through the space during 1997, with a third exhibit planned for February 5, 1998.

Inside Out: Ninth National Art Exhibition of the Mentally Ill: May 1-June 22, 1997. This exhibit was installed with the collaboration of the National Art Exhibition by the Mentally Ill, Inc., to provide an opportunity for a public outlet for the creative expression of artists diagnosed with mental illnesses.

Just Say Know: September 1, 1997-January 5, 1998. This exhibit featured posters made by children aged 12 to 17 as a part of educational drug prevention programs. Sixteen posters came from a biannual program for Girl Scouts, held at NMHM in October 1996 and March 1997. An additional 35 posters came from students at The Barrie School in Silver Spring, Md., as part of a program implemented by the Family Support Center in Bethesda MD.

Doctors at the Gate: The Public Health Service at Ellis Island. Planning for this exhibit began in July 1997. Installation is scheduled for February 5, 1998. The Museum is collaborating with the Public Health Service historian to revise and reinstall an exhibit that was previously developed for the National Park Service's, Ellis Island Immigration Museum. The exhibit is to be brought to NMHM in order to commemorate the 200th anniversary of the Public Health Service.

WRAMC Lobby Display: A display case highlighting the Museum was installed in the WRAMC hospital lobby on February 3. Posters promoting current temporary exhibits are rotated into the display as appropriate.

Exhibits Committee: The Exhibits Committee, chaired by Lisa Berndt, continues to monitor exhibit schedules, staff time allocation, and insure resonance between the current exhibit program and the Museum's long-term goals.

DIVISION OF COLLECTIONS

MISSION

The Collections Division of the NMHM preserves materials representing the broad subject areas related to the history and practice of American medicine, military medicine, and modern medical and health issues and research. Each collecting division specializes in different media and subject areas. The division's responsibilities are:

- To provide the highest level of professional care for the NMHM collections and their associated documentation.
- To collect objects, specimens, and related archival materials deemed significant and relevant to the mission of the NMHM. Potential acquisitions must be properly documented and supported by the division's collecting plans.
- To support research, exhibits, and public programs through access to collections.

The division is comprised of three collecting divisions (Anatomical Collections, Historical Collections, and the Otis Historical Archives) and the Offices of the Conservator and the Registrar.

STAFF

- (A) Lenore Barbian, Ph.D., Collections Manager
Alan Hawk, B.A., Collections Manager
Donna Scorzelli Quist, B.A., Collections Technician
Joan Redding, M.A., Assistant Archivist
Michael Rhode, B.A., Archivist
Paul S. Sledzik, M.S., Curator
Christina Sweet, M.S., Conservator
Jon Zachman, M.A., Registrar

Intern: Jessica Sutton

Volunteers: Marcy Leverenz, Sol Pargament, Markus Ring

CURATION AND COLLECTIONS MANAGEMENT

The responsibilities of the division lie largely within the curation and management of collections. These responsibilities encompass management of existing collections, acquisition of new objects and collections (through following the collecting plan), registration of collections and objects, conservation of objects and collections, maintaining information about the collections, space management, and loans (both incoming and outgoing) of objects.

The Collections Committee completed collecting plans for each collecting division and submitted these to the Director, NMHM, for approval. Issues of curation and collections management were addressed in biweekly meetings of the Collections Management Committee.

Anatomical Collections:

With the assistance of an intern, Jessica Sutton, cataloging of the Milton Helpert New York City Medical Examiner Collection was completed. With the help of other museum Anatomical staff, rehousing of several collections (the Shupe Veterinary Fluorosis Collection, the Block Collection, and the Orthopedic Pathology Collection) were completed at the warehouse.

Historical Collections:

Computerized inventory of artifacts stored in Hammond Hall, the microscope storage area, the warehouse, and the exhibit halls now include 14,319 artifacts, approximately 98% of Historical Collections. The artifacts included are listed by catalog number, accession number, classification based on medical subject headings, object name, and location. The Historical Collections Computer Catalog, which differs from the inventory by containing a more detailed description of the artifact, now includes 8,850 artifacts, approximately 63% of the collection. The 606 items cataloged in 1996 include new accessions, previously accessioned artifacts and artifacts going out on loan.

Otis Historical Archives:

Joan Redding arranged, rehoused, and wrote finding aids for the WRAMC and O'Reilly collections; added material to the AFIP historical files and updated the finding aid; began reorganizing and rehousing the Army Veterinary Corps Archives; rehoused most of the New York Police Department Missing Persons Photograph Collection; and completed various smaller processing projects. She and Rhode cataloged additions to the Medical Ephemera, New Contributed Photographs, and General Medical Products Information collections. Marcy Leverenz and Peggy Garner, volunteers, cataloged several boxes of the Reeve Collection photographs. A conservation contract project to preserve the Reeve negatives was planned. With the help of the registrar and conservator, several collections were placed on movable aisle shelving at the warehouse.

OFF-SITE STORAGE FACILITY

During the past year, the Museum made significant progress in addressing collection management needs at its off-site storage facility in Gaithersburg, Md. Storage equipment—racking and shelving—was purchased for the facility. The crating of several historical pieces was completed through

the help of SID and a crating contract with ARTEX. Several rehousing projects were completed for Archives (Ackerman papers, Gorgas Hospital pathology reports, general medical research files, and the Reeve Collection); Anatomical (the Block Collection, Shupe wet tissue and skeletal material, and the Popper Collection); Neuroanatomical (completion of Lindenburg rehousing; the Welker wet tissue, slide, glass plate and photographic print collection; and the Blackburn Collection); and the Orthopedic Pathology Codman Collection. An additional 140 brains in the Blackburn Collection were surveyed for determining refurbishing priorities.

Several safety issues were upgraded at the facility. An eyewash station was placed in the wet tissue storage area. Flammable storage cabinets were purchased for the rehousing of wet tissue material from the Shupe Collection, the Welker Collection, the Orthopedic Collection, and the Blackburn Collection. Minimal outfitting of the laboratory space was planned and equipment was purchased, including a portable fume hood, laboratory sinks, eyewash, and safety shower. Disaster supplies were purchased to help respond to a formalin spill, water leak, or other potential disasters.

ACQUISITIONS

The three collecting divisions (Anatomical Collections, Historical Collections, and the Otis Historical Archives) and the Neuroanatomical Collections acquired 104 accessions during the past year. The acquisition of these unique artifacts, specimens, and archival material expanded the Museum's holdings by several thousand items.

The Neuroanatomy Division acquired the Wally Welker Collection of comparative mammalian brains from the University of Wisconsin—Madison. Museum staff, including Archie Fobbs, Christy Sweet, and Jon Zachman, travelled to the University of Wisconsin to survey, inventory, and pack the collection for shipment to the Museum.

Individuals who donated materials to the Museum include Eva Bernhardt, Dr. Michael Caplan, Elizabeth J. Cox, Col. David W. Dick, Bert Hansen, Alice J. Haupt, Alan Hawk, Cindy Hawk, Steve Hollingshead, Dr. Bernard Kirschbaum, M.D., Evelyn A. Lambros and Nichols W. Lambros, Dr. Craig Mallak, Barton J. Mallory, Jr. and Jeane J. Mallory, Wendy Miller, Dr. John Moad, P.O'B Montgomery, Jr., M.D., Sabrina Moore, Sol Paragament, Henry Ponton, Donna Quist, Margaret Reid, Markus Ring, K. Daniel Rose, M.D., Michael Rosenberg, Professor Sam McGee-Russell, Pauline Suraci, John R. Thurlow, E.R. and C.E. White, and the Estate of Wolf Citron.

Organizations that donated or transferred material to the Museum include the American Society of Clinical Pathologists; the Armed Forces Institute of Pathology; the U.S. Navy Bureau of Medicine and Surgery, Department of Naval Medical History; the Centers for Disease Control and Prevention; the Liberty Memorial Museum and Archives; the Office of the State Archeologist, Connecticut State Museum of Natural History; the Walter Reed Army Institute of Research, Department of Space Biosciences; the Walter Reed Army Medical Center; the Wilford Hall Medical Center, Lackland, AFB; and the United States Army (47th MEDSOM, 3rd Medical Command).

Historical Collections

Significant additions to the Historical Collections include the Wilford Hall USAF Medical Center's donation of the prototype high frequency oscillatory ventilator (HFOV), developed in 1980 by Dr. Forrest Bird in collaboration with Wilford Hall. It was used in research studies to demonstrate the effectiveness of high-frequency ventilation in the treatment of respiratory distress.

The Centers for Disease Control and Prevention (CDC) donated a trunk full of items used by the team of epidemiologists sent to investigate the Ebola outbreak near the Kikwit, Zaire. Included in the trunk are sampling kits developed by the CDC to collect specimens from potentially infected people. Also included in the donation were small traps used to catch rodents and a net used to catch birds in an effort to identify the vector.

Dr. P. O'B Montgomery donated two versions of the Woodlawn Wanderer 9, the first automated cell culture laboratory designed for use in a spacecraft. The devices, which took time-lapse photographs through a 40X microscope, were constructed to study the effects of a zero gravity environment on the growth of human cells. The first Woodlawn Wander 9 was intended for an *Apollo*

mission that was canceled after the *Apollo 13* mission, and the second one was used in the *Skylab III* earth orbital mission in 1973.

Walter Reed Army Institute of Research transferred an example of their STL-A (Space Tissue Loss module "A") that was developed for use on the *Space Shuttle*. It was designed to culture cells in a zero gravity environment for study on earth. This example was assembled from the components used in early missions. Dr. K. Daniel Rose donated a Habitrol nicotine transdermal patch autographed by the three original principal investigators—K. Daniel Rose, Jed Rose, and Murry Jacobwitz.

Otis Historical Archives

In the Otis Historical Archives, collecting continued. Major acquisitions include the Suraci Collection (photograph albums and case studies from a plastic surgeon during World War II); the American Society of Clinical Pathologists 1995 photographic contest winning prints; the Johnson Collection (photographs and memorabilia from a 1931 Army School of Nursing graduate); and the U.S.S. *Des Moines* Dental Collection (post-World War II material from the dental office of a Navy cruiser). The Archives continued to receive AFIP material, including 12 boxes of records from the Registry of Radiation Biology. Departing staff member Greg Naranjo transferred his nutrition research material, and other staff members transferred their obsolete files. Many small donations of books, posters, pamphlets, trade literature, and photographs were added to the overall collection.

Major acquisitions include St. Elizabeth's Hospital records, paintings, and photographs; histopathology and veterinary records from Dr. Cummings, late of Cornell University; AFIP records from former director Bruce Smith; AFIP educational slide sets; office files from Dr. Helwig; AIDS ephemera from WRAMC; accretions to the Army Veterinary Corps Archives from COL (ret.) William Clark; and museum records from staff members. Jack Beverland, a folk artist featured in a Museum exhibit and symposium on art of the mentally ill, donated one of his paintings, *Sunshine from Darkness*. Many small donations of books, posters, pamphlets, trade literature, and photographs were added to the overall collection.

CONSERVATION

Conservation treatments were completed on 67 objects from the collections; 12 anatomical specimens were refurbished. Significant projects included the treatment of 14 historical artifacts relating to the eye that were loaned for a traveling exhibition sponsored by the National Eye Institute, treatment of an accidental scratch on the Hammond portrait displayed on the exhibit floor, and the structural stabilization of a wax model displaying injection scars.

Five paintings in the Archives' holdings were conserved outside the Museum. Portraits of Clement A. Finley, Thomas Lawson, George M. Sternberg, William C. Gorgas, and Robert O'Reilly were treated by Justine Wimsatt & Associates Art Conservation Studio. The Lawson and the Finley paintings are being considered for an updated version of the Civil War Medicine exhibit.

Several oversized historical artifacts stored in Hammond Hall were surveyed, inventoried, and measured for crating. The Archives painting holdings were surveyed, inventoried, and measured to aid in designing a painting storage system.

Conservation

The Conservation Office received three requests for conservation information. These requests asked for information on mold growth, storage of human hair, and artifact handling guidelines for library collections. The researchers were affiliated with Reynold Library, the University of Alabama at Birmingham, the National Archives, and the Still National Osteopathic Museum.

Disaster preparedness and response issues were evaluated, with particular focus on chemical spills and water leaks. A serious formalin spill on the exhibit floor and seven water leaks over the year prompted immediate evaluation of disaster procedures. An SOP for Reporting a Chemical Spill in the Museum was written, along with Temporary Emergency Procedures. Disaster supplies were purchased to help respond to a formalin spill, water leak, or other potential disasters. A portable

eyewash station was purchased for the wet tissue storage area in Hammond Hall.

The Museum lost its Conservation Laboratory due to AFIP space concerns. This loss has adversely impacted wet tissue maintenance and conservation treatments.

LOANS

A total of 172 objects were loaned from the National Museum of Health and Medicine. This figure includes 96 anatomical specimens, 35 pieces from the Otis Historical Archives, and 41 artifacts from the Historical Collections.

Institutions that borrowed from the Museum include the American Academy of Neurology for an exhibit called "Training the 19th Century American Neurologist"; the Ansel Adams Center for Photography (San Francisco, Calif.) for an exhibit titled "Astronomy, Optics and Outerspace: Photography Beyond the Limits"; the Armed Forces Institute of Pathology; the Ellis Island Immigration Museum (Ellis Island, N.Y.) for an exhibit called "Doctors at the Gate: Public Health at Ellis Island"; the Food and Drug Administration; Glaxo Welcome for the traveling exhibit, "Medicine: The Inside Story"; the Mutter Museum (Philadelphia, Pa.) for an exhibit titled "The President is the Patient"; the National Eye Institute, NIH for a traveling exhibition entitled "Vision"; the National Library of Medicine (Bethesda, Md.) for the exhibit "Emotion and Disease"; the National Museum of American History; the National Museum of Natural History; the Strong Museum (Rochester, N.Y.) for a traveling exhibition called "Altered States: It's All in Your Head"; Turner Original Productions; the Uniformed Services University of the Health Sciences (Bethesda, Md.); the University of Bradford, Department of Archaeological Sciences (Bradford, UK); and Worldview Pictures.

Prior loans were extended to the Franklin Institute of Science Museum (Philadelphia, Pa.) for a traveling exhibition titled "It's All in Your Head"; the Uniformed Services University of the Health Sciences (Bethesda, Md.); and the University of Iowa Hospitals and Clinics Medical Museum for their exhibition entitled "Order and Disorder: An Exploration of the Mind."

Research Requests

The division completed a request from the Centers for Diseases Control for information on materials related to AIDS and sexually transmitted disease within the Museum.

Anatomical Collections

The Anatomical Collections received 58 written and e-mail inquiries, including information requested from Tulane University School of Medicine; Gettysburg National Battlefield Park; the Department of Pathology and Laboratory Medicine at University of Minnesota School of Medicine; VAMC-Boise, Idaho; and the Chicago Historical Society. The collections staff provided assistance to the National Museum of Civil War Medicine in Frederick, Md., in the development of case histories of wounded Civil War soldiers. Several artists visited the collections this year to draw or photograph various pieces. These visitors included Ann Lovett, Sophie Bellissent, Ann Starr, and Ari Rousimoff.

Historical Collections

The Historical Collections responded to 175 written, telephone, and Internet inquiries. In addition, Alan Hawk provided technical assistance for the display of a pistol and other artifacts belonging to MAJ Walter Reed for the Command Suite at Walter Reed Army Medical Center. These artifacts were transferred to a new display case when the Base Commander's office moved to Building 1.

Otis Historical Archives

The Otis Historical Archives received approximately 212 requests for information this year, not including Museum and AFIP requests, visitors, or referrals to other institutions. The number of requests increased by 18% over last year. Researchers were affiliated with the Smithsonian Institution, the Maryland-National Capital Parks and Planning Commission, Oregon State University, Dartmouth College, Boston University, the University of Rochester, the University of Arizona, the University of British Columbia, the University of New South Wales, the University of Quebec, Rowan University, Memphis College of Dentistry, the Pan-American Health Organization, Public Health Reports, Cedars-Sinai Medical Center, Center for Military History, Ft. Sam Houston, the Pentagon, WRAIR, the U.S. Navy, CBS News, CNN, Kyoto News, the *Wichita Eagle*, *Playboy* maga-

zine, Time-Life Books, the Milwaukee Public Library, Hudson River Museum, New South Association, Dale Gallon Historical Arts, WGBH Film and Video Resource Center, Robert Kenner Films, Worldview Pictures, Production Group, Inc., Powderhouse Productions, Pinball Productions, Inc., University of Iowa Hospitals and Clinics, *American History* magazine, Yale University, the Kennedy Assassination Records Review Board, the National Library of Australia, Cornwell Enterprises, Turner Original Productions, the Discovery Channel, the Atlanta History Center, the University of Pennsylvania, the National Institutes of Health, the University of Arkansas School of Medicine, the National Museum of Civil War Medicine, and the Medical Center of Central Massachussetts, among other institutions. Photographs were sent to the Medical Museum at the University of Iowa Hospitals and Clinics for an exhibit on emergency medicine. Original photographs of an eclipse of the sun taken by Museum photographers in the 19th century were loaned to the Ansel Adams Center for Photography for an exhibit. Worldview Pictures is producing a multihour documentary with historian John Keegan on the history of war, and the Archives provided films and stills for the project. The Vorwald Collection of industrial medicine material continued to receive heavy use, primarily by law firms. Research requests increased in both complexity and the volume of work necessary to complete them this year.

Exhibition Support

Division staff provided script and label copy, research support, loan processing, object examination, conservation treatments, objects installation, and light level surveys of several in-house exhibits and temporary exhibitions. These included "National Museum of Health and Medicine: Dedicated to Health from the Civil War to the 21st Century," "Internal Landscapes," "Research Matters: Learning about Leg Injuries," and "Jill Lion: Reckoning in Stone." Smaller exhibit retrofits were completed for "DOC: Vietnam War" and "Civil War Medical Illustrations," now incorporated into the Civil War Medicine exhibit. Staff support was also provided for an off-site exhibition at the Pentagon, "Tropical Medicine."

Exhibit guidelines on light levels were established. Light level surveys are now incorporated into the exhibit process. Electrical contract work was completed in Hammond Hall, so that museum lighting standards could be maintained. The contract work allows the Museum to eliminate light exposure in the majority of "Human Body, Human Being" during the hours the Museum is closed.

Exhibit maintenance, case cleaning, and inventory were completed in the Microscope exhibit.

In the area of exhibit research and writing, the staff supported several exhibitions. At the beginning of the year, Joan Redding and Sarah Carey cowrote "The National Museum of Health and Medicine: Dedicated to Health from the Civil War to the 21st Century." Michael Rhode rewrote the Civil War Medical Illustration exhibit, with the assistance of Joan Redding. Michael Rhode also rewrote the label text for the Lincoln exhibit. Joan Redding edited the new Lincoln script as well as all other new label text for the Museum.

The Archives provided influenza photographs, photomicrographs, and dermatology stereographs for various exhibits. Rhode worked on the new Civil War Medicine exhibits, and Redding edited numerous exhibit scripts.

PROFESSIONAL ACTIVITIES

In addition to responsibilities involving collections management, the staff of the Division of Collections Management participated in educational activities, professional meetings, public lectures, scientific projects, and support to the Office of the Armed Forces Medical Examiner.

Alan Hawk is presently serving as vice president of the Medical Museums Association. He completed his term as secretary-treasurer of the Washington Society for the History of Medicine in May 1996. He continues as guest editor for an issue, "Spoils of War," to be published in *Caduceus* in 1997 or 1998. The issue is devoted to the history of materiel medical intelligence from the Second World War to the Persian Gulf War and the collections of captured medical instruments in the National Museum of Health and Medicine and the Army Medical Department Museum in Ft. Sam Houston. He published two articles for the *AFIP Letter* about recent acquisitions to the collection: "Stalking

Ebola: Artifacts in Museum Trunk Reveal Strategies of the Hunt" (December 1996) and "A Bistoury, A Bullet: National Museum of Health and Medicine Collections Document a President's Struggle to Survive" (June 1996).

Joan Redding successfully applied to attend the competitive NHPRC Institute for the Editing of Historical Documents in June. She received training in historical editing for a projected publication of the Museum's 19th century records. In addition to exhibit scripts, Joan Redding edited press releases, brochures, job descriptions, and the draft of Rhode's book. She served as a member of the Museum's Public Programs Committee.

Michael Rhode completed his draft of a book on the Museum's Civil War photographs being coauthored with Dr. Blair Rogers. This included extensive research in primary sources both at the Museum and at the National Archives. The book will be published by Duke University Press. He also wrote an introduction to a reprinting of an Army Medical Museum publication, *Photographs of Surgical Cases and Specimens*. This reprint of 400 photographs published by the Museum between 1864 and 1881 was privately published in 1996 by two doctors who are interested in the Civil War. The *Guide to the Collections at the National Museum of Health and Medicine* is essentially complete and ready for publication by the American Registry of Pathology. Photographic illustration selection is ongoing.

Rhode was appointed agency compliance official for the John F. Kennedy Assassination Records Review Board and will report on the AFIP's efforts to find material related to the President's death. He also served throughout the year on the AFIP's Institutional Review Board, the Human Subjects Committee, and the new building committee, the Master Planning Group. Mr. Rhode continued to serve this year on the Museum's Administrative Committee.

Both Mr. Rhode and Ms. Redding were members of the Museum's Collections Committee. Mr. Rhode and Redding attended the Society of American Archivists convention in Chicago. The Archives loaned the only existing copy of Snowden & Brother's 1860 *Illustrated Wholesale Catalogue of Surgical and Dental Instruments, Elastic Trusses, Medical Saddle Bags, Abdominal Supporters, Shoulder Braces and Druggists Sundries* to Norman Publishing of San Francisco, which reprinted it, crediting the Museum and AFIP on the book spine and title page.

Paul Sledzik successfully organized two courses in forensic anthropology this year. The ninth annual NMHM/AFIP course held at USUHS was attended by 40 students. In July, Tony Falsetti travelled to the University of Bradford in England to cosponsor a version of the NMHM/AFIP forensic anthropology course organized by Paul Sledzik. This course will be repeated. He was an author and reviewer for course material for the Mass Fatality Incident Train-the-Trainer Course, held at the Emergency Management Institute in Emmitsburg, Md. He consulted with the USPHS and nonprofit groups about mass disaster mortuary response. He continued his role as an Advisory Committee member for the Skeletal Explorer Project, funded by FIPSE and NSF, at Department of Anthropology, Cleveland State University. He continued as a researcher for the History of Health and Nutrition in the Western Hemisphere Project (funded by the National Science Foundation) at Ohio State University. He was a panelist at Malice Domestic VIII (Mystery writer's conference) for two panels: "Everyone's an Expert" and "The Scientific Sleuth," held in Bethesda, Md.

Christy Sweet represented the Museum at the annual meeting of the American Institute for Conservation of Historic and Artistic Works. Ms. Sweet and Ms. Carey attended a Museum Exhibit Lighting Seminar sponsored by the National Park Service, the Washington Conservation Guild, the National Archives, and the National Center for Preservation Technology and Training.

Jon Zachman attended the annual meetings of the American Association of Museums and the Smithsonian Institution's Registrar's Council. Mr. Zachman also attended a course sponsored by the National Preservation Institute called "Section 106 of the Historic Act: Review and Update for Practitioners."

MEDIA REQUESTS

The 3M Healthcare Corporation filmed several artifacts for their videotape, "Confronting Antibiotic

Resistance: An Increasing Threat to Public Health," in January. In November, several artifacts relating to the U.S. Army Medical Department Nursing Corps and Reconstruction Aids from Historical Collections were filmed by Maryland Public Television for an upcoming documentary about Maryland during the First World War.

Collections materials from the Anatomical Collections were filmed for several television and radio programs, including the Discovery Channel, *The Search for Dracula*; New Dominion Pictures/New Detectives Series, *Soldier Stories*; the Halloween show for *The Morning Product*, WHFS radio (Annapolis, Md.); and New Vision Productions, *Between the Bullet and the Battlefield*.

RESEARCH DIVISION

MISSION

To acquire, preserve, and encourage the use of major research collections for all qualified members of the research community. The collection is made available for research and for education by appointment and via Web site. Continued stimulation of new hypothesis-driven research is a top priority.

The Human Developmental Anatomy Center has entered its fifth year of funding by the National Institutes of Child Health and Human Development, The National Center for Research Resources, and the Office of Research on Women's Health. The Neuroanatomy Collections continue to be the recipient of National Science Foundation funding for electronic collection development.

STAFF

Adrienne Noe, Ph.D., Director
Archibald Fobbs, Museum Specialist
Elizabeth C. Lockett, Imaging Specialist
William F. Discher, Imaging Technician
(A) Deborah Sweet, Imaging Technician
Sandra Westbrook, Project Technician

Adjunct Scientists

Dale Huff, M.D., Department of Pathology, Magee-Womens Hospital, Pittsburgh, Pa.
James Petras, Ph.D., Neurotoxicology, WRAIR

Volunteers

Edward Beeman, M.D.
Stephen Schiaffino, Ph.D.

Student Interns

Chaire Nuntz
Shilpa Shah
Jennifer Burrell
Brondon Thornberg
Julie Probst
Rahul Dasgupta
Keewook Song

Collections

Human Developmental Anatomy Center
Carnegie Institution Human Embryological Collection
Cornell Human and Comparative Embryology Collection
Hooker Humphrey Collection
The Elizabeth Maplesden Ramsey Collection
George Sedgewick Minot Embryological Collection

Gaenssler Pulmonary Pathology Collection

Neuroanatomy

Yakovlev-Haleem Neuropathology and Development Collection

Blackburn-Newmann Collection

Lindenburg Forensic Pathology Collection

Rubenstein Collection

Adolph Meyer Neuropathology and Development Collection

Isabel Lochard Comparative Neuroanatomy Collection

HUMAN DEVELOPMENTAL ANATOMY CENTER

Acquisitions

In 1997, the Anatomy Center acquired the Cornell Human and Comparative Embryological Collection from the Cornell School of Veterinary Medicine, Ithaca, N.Y. The collection consists of over 100 serially sectioned human embryos and approximately 150 guinea pig, mouse, and rat embryos.

Conservation

Reprints from the Minot Collection were placed in acid-free envelopes and folders and filed. The wet tissue from the Carnegie Collection was checked and topped as necessary. A complete electronic inventory of the wet tissue was made and is now available. An expanded database for the serially sectioned materials from the Carnegie Collection has been completed and is now being reviewed for accuracy. This information will update the database currently provided to researchers via Web site.

Tours

The Anatomy Center has hosted 18 tours this past year. Visiting military VIPs, school tours, and professional organizations have all come through the center. The center was host to one television crew filming the image capture and modeling process for broadcast in the U.S. and abroad. In addition, center staff were interviewed by radio and print journalists about the center and its projects.

Research

The center was visited by numerous researchers who used the reprint files to look into the social history of the Carnegie Collection and one researcher who looked at the history of the Minot Collection. Visiting researchers reviewed the collection for specimens relevant to their fields of study and imaged tissue sections using both digital and 35mm cameras. A few on-site researchers took advantage of the center's networking capabilities to send data back to their home facilities electronically.

The center has responded to numerous remote requests for images of sections in various file formats; 20 tapes of section data were sent out this past year. Images from 30 sectioned embryos were electronically sent to researchers. Three-dimensional CGI models of embryos, images of whole embryos, animations of growth and development of embryos, and historical information about prominent embryologists have also been sent to various researchers and for publication.

Researchers

There have been 17 on-site researchers working in the center this past year, for a total of 96 days. Five researchers were here for one day for general investigation purposes. All other researchers used the collection for more than one day. Two researchers have used nonsectioned materials from the collection for Magnetic Resonance Microscopy projects. This required approximately six staff days for support. Off-site researchers numbered five and used about 7 staff days.

Collaborative Projects

The center continued its collaborative project with the Congenital Heart Research Center at Oregon Health Science University. OHSU sent a student intern to the center for 2 months to aid in the

capture of section images. Several new data sets were added to the collection as a result. Dr. Dale Huff continued to work on documenting the biphasic model of mesonephric development using computer-generated models. The University of Illinois at Chicago began a collaboration to produce a series of animations depicting normal human development using models generated at the center. These will be available via Web site for teaching and patient information. The center is continuing to work with Dr. Bradley Smith from Duke University's Center for In-vivo Microscopy providing specimens for a three-dimensional atlas of human development using MRM technology to generate the images.

NEUROANATOMICAL DIVISION

Web site

The Web site implemented by the University of Wisconsin-Madison Medical School contains information about the Neuroanatomy Collections of the National Museum of Health and Medicine of the Armed Forces Institute of Pathology. This year collection inquiries via the Web site increased 30%. Requests for collection images, visits to the collection, and visits to the museum have all increased as a result of the Web site. The Web site receives about 81 accesses per day from all over the world. This year for the first time the Web site was linked to the Human Developmental Anatomy Center Web site.

Conservation

The wet tissue conservation for the Yakovlev-Haleem Collection and the Welker Comparative Neuroanatomy Collection continues. Conservation procedures are performed on a regular schedule, and fluids are changed as needed.

The Blackburn-Newmann Collection wet tissue evaluation effort has been completed. As a result of this survey, the condition of the tissue, the type of condition of the fluid, and the condition of the containers were obtained. This information is being used to develop an effective wet tissue conservation program to address the needs of this collection. Paper documents of the Blackburn-Newmann Collection were moved from the Department of Neuropathology and safely rehoused in map cases.

The Welker Comparative Neuroanatomy Collection's large reconstructive drawings and copies of the collection's comparative atlas were also rehoused in acid-free folders in map cabinets. This will preserve these documents for many years to come.

The Yakovlev-Haleem library is being organized into its new bookcases. As the reorganization is taking place, the condition of the contents is being evaluated. Some rehousing has taken place. This process continues.

Equipment

Several PCs have been added to handle the file transport process, image acquisition, and databases. There is also a new silicon graphic computer with digital cameras for graphic imaging. This equipment is available to researchers. The new equipment also allows us to send information via various media (ie., CD-ROM, zip disk).

Research

Neuroanatomy Collections added 10 new research collaborations. The number of researchers visiting the collections during 1997 totaled 130. The total number of research days in 1997 was 340. During the year, a new category of researchers visited the collection—walk-in researchers who obtained collection information via the Internet; also, the curator's membership in neuroscience organizations increased the number of researchers visiting the collections. Visitor service representatives of the Museum provide important guidance to this group of visitors to the collection.

Dr. Shirley Bayer and Dr. Joseph Altman from the University of Indiana completed phase 1 of their

projects studying the development of the brain. This project is very extensive. In 1997 alone, over 1,000 photographs were taken using over 26 different specimens from the collection. These photographs will be used in the production of a three-dimensional atlas of the development of the brain. Support for this project comes from the National Institutes of Mental Health.

Numerous other projects were supported by the Neuroanatomical Collections this past year. Dr. Katherine H. Taber and Dr. Ann Hyman of the Baylor College of Medicine's Herbert J. Fresley Center for Imaging are using images from the Yakovlev-Haleem Collection in their functional MRI study of the brain. Dr. Kondi Wong of the Department of Neuropathology, Armed Forces Institute of Pathology, and Dr. Don Riggomonti of the Uniformed Services University of the Health Sciences' reconstruction project. Dr. Harry Jerison of the UCLA Neuropsychiatric Institute is collaborating with HDAC and Neuroanatomy on the digital reconstruction of paleoneuroanatomy. Dr. Dean E. Hillman of the New York Medical Center and Dr. Larry Stensaas of the University of Utah College are using the Yakovlev-Haleem Collection for a study of the function of the interlaminar nuclei of the human thalamus. Dr. Vernon Armbrustmacher of the Medical Examiner's Office, Dr. Herando Mena, chairperson of the Department of Neuropathology, and Dr. James Henry, chief of the Division of Diagnostic Neuropathology are using the Lindenbarg Collection in the development of the AFIP forensic fascicle. Dr. Surya Konhowa, Blackburn-Newmann Laboratory, St. Elizabeth's Campus, and Dr. Kenneth Gorelick, Commission on Mental Health Service, St. Elizabeth's Campus, wrote a paper on the Blackburn-Newmann Collection entitled "A Century of Pathology at Saint Elizabeth's Hospital, Washington, D.C." In this article, the history and contribution of the collection are discussed.

Collaborations with Dr. Wally Welker of the University of Wisconsin-Madison and John Johnson of Michigan State University have been made possible by funding from the National Science Foundation. With this funding, a project technician was hired to assist the curator with research and development projects.

The Neuroanatomy Division was involved in developing a temporal bone collection database, the Museum's public programs and exhibits outreach, and the brain awareness week at Georgetown University. Neuroanatomy and HDAC have been complimented on the working relationship they have established with departments inside the AFIP. Graduate students are incorporating the use of the collections in their doctoral research projects, and elementary and secondary educators are becoming increasingly interested in using the collections in their classrooms.

Tours

The Neuroanatomy Center hosted approximately 30 hours during 1997. S.B.S. Television of South Korea used the collections for a 3-day programming project on brain function.

Loans

Slides from the Yakovlev-Haleem Collection were loaned to the Howard Hughes Foundation for their exhibition, "Hearing and Seeing: Models for Thought."

Transfers

Archival documents found in the Yakovlev-Haleem Collection library were transferred to Otis Historical Archives.

LECTURES

1. Rhode M. Interview by Laurie Block for National Public Radio documentary, *Beyond Affliction: The Disability History Project*, December 30, 1997, airing May 4, 1998.
2. Rhode M. "The Armed Forces Institute of Pathology and Early Medical Photography" lecture, William Beaumont gastroenterology banquet, Reston, Va, November 14, 1997.
3. Rhode M. "The Army Medical Museum and Civil War Medical Photography" lecture, National Museum of Health and Medicine, Washington, D.C., March 26, 1997.
4. Rhode M. "The Army Medical Museum and Civil War Medical Photography" lecture, Smithsonian Associates, Washington, D.C., February 12, 1997.

5. Rhode M. "Surgical Photographs of the Army Medical Museum" lecture, Association of Licensed (Gettysburg) Battlefield Guides, Washington, D.C., January 23, 1997.

PRESENTATIONS

1. April 1997: Berkeley, Calif., Interdisciplinary Nineteenth-Century Studies Conference, "Morbid Memories: Constructing Meaning from the Public Presentation of Death in Nineteenth-Century Museums," Robert I. Goler.
2. April 1997: Atlanta, Ga., American Association of Museums, "Organizing for Research: Public History Scholarship in Museums," Robert I. Goler (moderator).
3. May 12, 1997: Washington, D.C., "Carnegie Embryo Computer Models and the Emulation of Embryonic Development," American Association of Clinical Anatomists Conference on Human Embryology, National Museum of Health and Medicine, William Discher.
4. May 12, 1997: Washington, D.C., Presentation of the Web site for the Human Developmental Anatomy Center, American Association of Clinical Anatomists conference on Human Embryology, National Museum of Health and Medicine, Elizabeth C. Lockett.
5. July 11, 1997: Honolulu, Hawaii, "Carnegie Embryo Computer Models and the Emulation of Embryonic Development," Annual Meeting of the American Association of Clinical Anatomists, William Discher.
6. October 1997: Washington, D.C., 24th Annual Conference on Washington Area Studies, The George Washington University/Historical Society of Washington, "Local History Awards," Robert I. Goler.
7. October 1997: New Orleans, La., "Comparative Mammalian Brain Collections Website: A Neuroscience Teaching Resource," 27th Annual Meeting of the Society for Neuroscience, J. I. Johnson, W. I. Welker, C. L. Dizack, A. J. Fobbs, Jr., A. Noe.
8. October 1997: New Orleans, La., "Brain Library: Primate Brains-Prototype of the CD-ROM for Making Available of Whole Brains and Stained Sections for Museum Collection," 27th Annual Meeting of the Society of Neuroscience, R. C. Switzer III, J. I. Johnson, A. J. Kurtz, R. G. McIncrow, W. I. Welker, A. J. Fobbs, Jr.
9. November 1997: Washington, D.C., National Museum of American History, Smithsonian Institution, "Veterans and American Memory," Robert I. Goler.

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1. Goler R, reviewer. *Journal of American History*. September 1997:660-661. Review of: Guthrie K. *The New-York Historical Society*.
 2. Noe A. The human embryo collection. *SPECTRA*. November 1997.
 3. Rhode M. Museum archivist keeps history alive. *AFIP Letter*. 1997;155:2.
- In addition, three articles are in press and one book is in progress.